

KAÁTAS has, on various occasions, evinced an inimical disposition to the English government.

The following are copies of the inscriptions on the seals of the present *Panghúlú* and *Rája adhi Rája* of Súngie Ujong, and of the *Dattu Múda* of Lingie.

سنه ۱۲۳۹	سلطان	سلطان
محمد عتاس	محمد جليل منصور نكن	محمد جليل منصور نكن
انچي بندر	كبد سران تر جنجغ كغد كلان	كبد سران تر جنجغ كغد كلان
	مهر اچ درج د سوغی اوجغ	فتراد بكری سوغی اوجغ
	سنه ۱۲۱۱	سنه ۱۲۱۱

Seal of KAÁTAS.

Of the *Rája adhi Rája*.

Of the *Panghúlú*.

From the dates and inscriptions on these seals, it would appear that the two first were originally granted, or more probably, renewed to their possessors, by Sultán MUHAMMED JALIL of Johor, in 1211 A. H.

The last is of still more modern date (1239), and merely bears the date, name, and assumed title (*Inchi Bander*) of KAÁTAS.

III.—*Journal of an attempted Ascent of the river Min, to visit the Tea Plantations of the Fuh-kin Province of China.* By G. J. GORDON, Esq. Secretary Tea Committee.

May 6th.—Anchored in the evening in the Min river, a short way below a narrow passage, guarded on each side by a fort, and hence named by Europeans, the Bogue, as resembling the entrance to the inner river of Canton. We immediately hoisted out our boat, and prepared every thing for setting out, as soon as the return of the flood, which we expected would be about midnight, would enable us to do so. We determined on trying the western branch of the Min, as laid down in DU HALDE'S Map of the province of Fuh-kín. We took with us one copy of a petition, for permission to import rice, on the same footing of exemption from charges as is granted at Canton, and grounded upon the unusual drought of the regular season for planting rice. Another duplicate we left with Captain MCKAY of the "Governor Findlay," to be presented by him to any Mandarin who might come on board to urge the departure of the vessel from the river. As the subject of the petition would require reference to Pekin, we calculated, that sufficient time would thus be gained to enable us to accomplish our object. The copy in our own possession would be resorted to only in case of our being intercepted. The delay in its delivery might be attributed to the altered appearance of

the country in consequence of some rain having already fallen, which made it doubtful whether the prospects of the season were so bad as to render the present a favorable occasion for such an application on our part, founded as it was on the assumption that the country was threatened with famine. Captain MCKAY was requested to be in no hurry about presenting his copy, but to let all persons understand that he had come with such a petition.

*May 7th.* At 1 A. M. we left the ship with a fair wind and flood-tide. We were 14 persons in all; namely, Mr. GUTZLAFF, Mr. STEVENS, and myself, the Gunner of the "Findlay," a native of Trieste, a tindal, eight lascars of various nations, Bengal, Goa, Muscat, Macao, and Malayan Islands, and my Portuguese servant, a native of Bombay. Having studied such charts of the river as we possessed, we resolved on turning to the left as soon as we came to the entrance of a river called in them the Chang: its position corresponding with that of the rejunction of the right branch of the Min, as laid down in the Jesuit's Map. Mr. STEVENS kept the look out at the head of the boat, and the Gunner steered, while the tindal sounded. The night was fortunately clear, and by 4 o'clock, we struck off into the western river. This soon widened into a very broad channel, which a little further on seemed to branch into two. That to the left-hand appeared full of shoals, and low sedgy islands, and we accordingly followed that to the right, which appeared still broad and clear. It was on our right, besides, that we had to look for the main stream of the Min. We had not proceeded far before the expanded sheet of water we were proceeding by gradually diminished in width, sending off several small branches in various directions, until at last it dwindled away into a narrow nullah, over which there was a stone bridge. Relying on the strength with which the tide flowed up this creek, as proof that it must lead into some other channel, we struck our masts, and passed the bridge, going on, till we saw reason to believe the reports of the villagers, that there was really no passage into the Min by that course. We accordingly came to, that our people might cook, intending to retrace our way with the assistance of the ebb. Unfortunately, however, the depth decreased so rapidly, that before we had proceeded far, we were fairly brought up, and obliged to wait for the return of the flood. Mr. STEVENS and Mr. GUTZLAFF went ashore to reconnoitre, and satisfied themselves that the branch we had avoided in the morning, was the proper one to be pursued; in which opinion they were confirmed by the villagers. We were unable to get a pilot. To all inquiries as to our destination we replied that we wished to go to Min-Tsing, the next Hín town above Fuhchow.

We bought a few supplies, but had a copper basin stolen while we were aground. The flood began to make at  $5\frac{1}{2}$  P. M., but it was  $8\frac{1}{2}$  before we got into the right channel. For two hours nothing could be more flattering than appearances; but suddenly the water began to shoal, and we were obliged to come to anchor.

At day light of the 8th, we found ourselves surrounded by sand-banks in all directions, without any visible channel by which we might advance when the tide should rise. One man agreed to pilot us into the Min for five dollars, and then left us. A second agreed for two, taking one dollar in advance, and after accompanying us a short way, made off. At  $\frac{1}{2}$  past 9 A. M., Mr. GUTZLAFF landed with the view of engaging some one to show us the way, when all at once a Kwanfou with a gilt knob said he would be happy to be of any use to us; and as the wind was contrary, would assist by towing us with his own boat. Mr. GUTZLAFF accepted his offer. The man appeared to be of the rank of a subaltern officer; such a proffer coming from such a quarter was of a very ambiguous character. He was probably sent to watch our motions, and took this method of defeating our object. We had, however, no alternative; our attempts to engage a pilot had failed, and we had found from experience, that without some guide, we could not advance. Besides, we could cast off from our professed friend as soon as we should see grounds for alarm. In fact, he led us back towards the mouth of the Chang river, and when he came close to a small hill fort, which we had observed the preceding morning, went ashore. We cast off immediately, and went into the Fuh-chow branch, where, after running up a little way, we anchored for the night. A cold drizzling rain made our situation not very comfortable, and what was more, we found ourselves about two in the morning in danger of canting over into deep water, from the fall of the tide, leaving the boat's keel deeply fixed in the mud of a sloping bank.

*May 9th.*—The tide favoring us at 7 A. M., we got under weigh, followed by a Government boat, and with a rattling breeze, soon reached Fuh-chow-foo. When near the bridge, we anchored, and struck our masts, and then shot through one of the openings with great ease. There were about a score of soldiers drawn up in arms at the bridge, and after we had passed through, four boats with soldiers put off after us. Mr. GUTZLAFF told the people on board, that if they came alongside when we came to an anchor, we would communicate with them. They continued to follow us at a little distance. Soon afterwards we came in sight of a second bridge, when we feared we should have been obliged to dismast; on approaching it, however, we

perceived that the road-way, connecting the piers, had fallen in at two places, through both of which boats under sail were able to pass. We selected what appeared to be the widest, and got safely through; but Mr. STEVENS observed, that the stones, which had fallen in, were but a trifle below the surface, and narrowed the passage so as to leave very little to spare beyond the width of our boat. We were now so far ahead of the war boats, that a fisherman ventured alongside to sell us fish. At  $\frac{1}{2}$  past 11 A. M., we came to anchor, that the people might refresh themselves; and the tide having turned against us, we remained at anchor till 4 in the evening. The war boats, in the mean time, came up, and a civil enquiry was brought from one of them as to what nation we belonged, whither we were bound, and with what object. Mr. GUTZLAFF, in reply, stated, that we wished to ascend the river, to see tea plants growing, to talk with tea merchants, and to ramble amongst the hills. No objection was made, but that the river was rapid and dangerous. When we weighed, however, these war boats weighed also, and after we had come to at night, they came up and took their station near us. We weighed early on the morning of the 10th, the drizzling rain still continuing, and the thermometer at  $57^{\circ}$ ; but having no boats in sight, to serve for our guidance, we thought it better to come to anchor again, and let the people have breakfast; as we weighed, the war boats weighed, and when we again anchored, they too came to an anchor. Before we set out the second time, two other war boats came up, which made at first, as if they intended to run foul of us, but showed no other marks of opposition, and we pushed on. I now reminded my friends of my uniform declaration, that I would not attempt to force my way if any actual resistance was offered, and that I even questioned the expediency of proceeding at all, if we were to be continually under the eyes of the government officers. However, as we greatly out-sailed them, and might possibly wear out their vigilance, we resolved to persevere. As we advanced, we found that none of the boats going up the river would answer our questions, the people sometimes clapping their hands on their mouths, or answering, that they durst not give us any information. After having got a long way ahead of the war-boats, however, we found the people communicative and friendly. We were told of several rapids on the Min river, which could not be passed without a very strong wind, and of other places where the current was not only violent, but the stream too shallow to float our boat. We had in fact already reached a place, where the stream, swollen by the hill torrents, that conveyed the rain, which had fallen during the last 30 hours, was so rapid, that with a light

breeze, and our oars, we were unable to make any way against it, and were obliged to come to an anchor accordingly.

The war-boats, by dint of pulling and tracking, surmounted the obstacle, and did not come to till they were about a mile or upwards ahead of us. We found the people very kind and friendly; but they were soon checked by the appearance of a Kwanfoo, who came to us in a little Sampan, with some loose papers in his hand. He addressed himself to me, but I answered with truth and nonchalance, that I did not understand him: Mr. GUTZLAFF, who stood by, recommended, that little notice should be taken of him; that all communications with the mandarins should be avoided, if possible; and that the papers which he offered, not being in the form of a letter, or otherwise in an official shape, should not be received. The officer then asked some of the people who were on shore near our boat, whether they knew if any of us could speak Chinese. Pointing to Mr. GUTZLAFF, they said he knew a few words, enough to enable him to ask for fowls, eggs, and ducks, which he wanted to buy; and that he spoke about nothing else. One of them was saying something about his distribution of books; but the Kwanfoo was at that moment laughing heartily at the odd appearance of one of our men, and the remark about the books, which was immediately checked by one of the by-standers, passed unnoticed. He still persevered, rather vociferously, in requiring us to receive his papers; when he was motioned to be off. Our Gunner gave the boat a hearty shove with his foot, which decided the movement of the envoy. After it was dark, the people of the village brought us bambús for pulling, with other supplies. The lull of the wind continuing during the night, we distinctly heard much beating of gongs, firing of arms, and cheering in the quarter where the war boats lay; but at day-break of the 11th, we thought we saw them under weigh in advance. A rather suspicious-looking man came to the shore, with a paper which he wished to deliver. We showed no inclination to receive it, and in attempting to throw it into the boat, tied to a piece of stick, it fell into the water, and was lost. Soon after, a simple looking peasant boy showed another piece of paper, which, from its rude appearance, I thought not likely to have come from the authorities, and therefore received and handed it to Mr. GUTZLAFF. It was an intimation, that multitudes of officers, with an army of 9000 men, were drawn up close by, and that there were many tens of thousands of soldiers further on. This was the first decided threat we had of resistance, and it was so grossly exaggerated, that we attached no other importance to it, than that it intimated decided objection to our further advance.

We had already fully resolved on not having recourse to force, unless it became necessary to resort to it, in order to extricate ourselves, if an attempt were made not merely to drive us back, but to seize our persons; and we now proposed to use every exertion to get as far as possible ahead of the war-boats, engage chairs for our conveyance by some inland route, and send back the boat under the charge of the Gunner.

The day being for the first time clear, we were engaged all the morning in baling out and washing the boat; and in cleaning our weapons, much rusted by the wet weather we had hitherto experienced. A breeze springing up a little after 11 o'clock, we hastened to avail ourselves of it, and all our arms were stowed away as speedily as possible.

We had gone on some way ploughing the stream in beautiful style when all at once shot began to fall about us. We deliberated for a moment what was to be done. We believed that retreat would not save us from further firing, as long as we were within its reach, if we would take the practice of the troops at the Bogue as an example of the general rule of the Chinese in such cases; and if we could get out of the reach of their shot by running ahead, we might have time for negotiating. On turning a point, however, the wind failed us, and our enemies pursuing us, the firing became more hot and dangerous than ever. My next idea was to run the boat ashore, and attack the Chinese, but the river was very narrow, and on the opposite bank they had erected a mud breast-work, from which they could fire on us with their small cannon, with full effect; and it would be exceedingly difficult to get at our assailants, on account of the steepness of the bank where they now stood. After receiving a good peppering, we put about; but as I anticipated, they continued to fire upon us: and my servant, with one of the lascars, was wounded, though both slightly, and all of the party had narrow escapes from death. The strength of the current soon carried us beyond their fire, and we were in a fair way of reaching Fuh-chow before day-break of the 12th, when we unfortunately missed our way some time after the top of high-water, at 2 o'clock A. M. At day-break, we found ourselves on high ground, 60 yards from the nearest point of the river. We had nothing for it, therefore, but to wait the return of the tide. Numbers of men, women, and children came about us to sell geese, fowls, and fish. Some amongst the crowd we recognised, as having been amongst those we had seen while attempting the western branch of the river. They noticed the marks of the balls that had passed through the gunwale, or stuck in the sides of

the boat; but this did not seem to make any difference in the friendliness of their demeanour. While we were at breakfast, two boats came up filled with soldiers, who were immediately landed, and one party marched towards our boat, while another was drawn up as a reserve. The officer, who commanded the advance, with several of his men, scrambled into the boat. They were desired by Mr. GUTZLAFF to retire; but not complying, our people were desired to turn them out, which they did accordingly. I collared their officer, and was on the point of tripping up his heels, when he threw himself down, and Mr. GUTZLAFF begging me to leave him to him, I desisted from further violence, though the loud and insolent manner of the man made forbearance not very agreeable. Mr. GUTZLAFF then commenced rating the fellow in such animated language, that he became apparently thunderstruck, having no apology to offer for the rudeness and violence with which he came to execute his commission, which he said was merely to inquire who we were, and what we wanted, and to desire us to be off. Mr. GUTZLAFF informed him that we came to present a petition to the Viceroy, but not having met with an accredited officer, its delivery had been postponed; that we had taken an excursion on the river, in order to see the tea plant; that we had proceeded openly, and avowed our intention without being told; that so innocent an object could never draw on us treatment such as no civilized government would offer to innocent strangers. He then harangued with great energy and effect, on the base, treacherous, cowardly, and barbarous conduct we had experienced on the preceding day, and on our own forbearance in not returning the fire; showing him, that we had plenty of arms, which we had taken for our defence against robbers, and assuring him, that we were not afraid to risk our lives against numbers: but had not come with the intention of making war on the government of the country, and would therefore wait to see whether that government would afford us redress by punishing those villains who had thus without any provocation attempted to take our lives, before having recourse to other means. If justice should be withheld by the provincial government, the case might go before the Emperor, and if punishment were not then inflicted on the guilty, the affair was not likely to end there. Mr. GUTZLAFF's eloquence, with the display of our fire-arms, left the Kwanfoo without a word to say for himself, or for his country. He acknowledged, that we had been shamefully treated; but that he was not of the party, and could not be implicated in their guilt, and promised that we should experience nothing but civility from himself. He received our petition, which he handed to one of

his people to take to his boat, and ordered off the rest of his men. He agreed to assist us in getting off from the field where we lay, and to tow us on our way as far as Mingan—a tower and fort, a short way below the place, where the western branch rejoins the Fuh-chow river. We asked him if there was no way of going down without passing under the bridge of Fuh-chow. He said, there was; and that he would probably take us by that route. We got afloat about 11 A. M., and two or three hours afterwards, recognised our position to be that which we had abandoned in despair four days before. Had we remained where we lay on the 8th, till the flood had made, it would have carried us into the main river, and we should have had one or two days start of the war-boats, or perhaps entirely escaped their observation. The Kwanfoo continued on board, except when relieved by an inferior officer from the towing boat, intending, as we presume, that we should appear to be his prisoners. In the afternoon, the wind became very strong, and the fleet ran in towards a large village, where they proposed anchoring for the day. Finding, however, that the bottom was stony, and that there was already too little water for our boat, we refused to remain, and were preparing to set sail, when the officer, who had brought us on, earnestly requested to be taken into our boat again. We received him on board, and were again taken in tow, the other war-boats accompanying. At dusk, they wished to take us to another large village; but we pointed out a more sheltered spot, and they took us there accordingly. The officers still remaining on board, Mr. GUTZLAFF was requested to desire them to withdraw, which they did; and as they had been uniformly civil since morning, I sent each of them a pair of blue printed cotton handkerchiefs. It was settled that we should again get under-weigh with the morning's ebb, and that after reaching Mingan, we should pursue our way to the ship, without further attendance. At 10 o'clock P. M., I was surprised by a letter from Captain MCKAY, of that day's date; he stated that he had been importuned in the most abject manner, to recal us, as orders had been issued to drive us out; which could not be carried into effect. He concluded that we must by that time have got so far on our way, that before we could be overtaken, we must have accomplished our object. At 1 A. M. of the 13th, we got under-weigh, towed as before; but escorted by a numerous fleet of war-junks, one of which carried three lanterns, and the others, one each, on their poops; as all these vessels had to make short tacks in a narrow channel, the sight was rather fine; and when we reached Mingan, a number of rockets were discharged, which had a very grand effect. We had not permitted any Chinese officer to



come on board our boat when we started ; but contrary to stipulation, they now again insisted on coming ; while we showed a determined resolution to resist : on consulting their commander, they were directed to let us go freely. We lost our way however in the darkness of the night, and were assisted by a war-boat in the morning, in recovering it. As we approached the right channel, we found several war junks stationed as a guard. Three or four of them accompanied us for some time, but gradually dropped off. The towing junk too took occasion to make us over to a large open boat, from which we soon afterwards cast off. On passing the forts at the Bogue, we were honored with a salute of three guns from each, as well as from some war junks above, and others below, the forts. At 2 p. m., we got on board the "Findlay." In pursuance of our declared intention, I prepared a petition to the Viceroy, praying for inquiry into the conduct of our assailants on the 11th, and the infliction of adequate punishment upon them for their unjustifiable attempt on our lives. Mr. GUTZLAFF was good enough to put my petition into Chinese form, and have it ready for delivery next morning, in expectation, that as had been the practice hitherto, some officer of rank might come on board. None having arrived, however, I resolved to go on board the admiral's junk, and deliver my petition there, explaining its object to that officer. Mr. GUTZLAFF and Mr. STEVENS accompanied me ; we found in the cabin two messengers from the Viceroy, both of them assistant magistrates, wearing colorless crystal knobs ; two vice-admirals, Tsung-ping knan, one of them, the naval commander-in-chief of this station ; one colonel of the army, Yen-keih, and one Pa-tseang, or subaltern. Having handed to them the petition, one of the messengers wanted to open it ; but on being requested to deliver it to the Viceroy, began to enquire what were its contents. Before coming to that subject Mr. GUTZLAFF adverted generally to our character as foreign merchants, and our wish to import rice. The Chinese assured us that it was from no unwillingness on their parts, that we were not allowed to trade, but that they were obliged to act under the prohibitory orders of the Emperor. As to the importation of rice, the Fú-Tseang at first affected to misunderstand us, as if our application were for permission to export rice to our own country from Fuh-kin. One of the messengers told us, that the Viceroy would give us no answer, when Mr. GUTZLAFF quoted some instances of official replies from head quarters, that made him waive this objection.

Having shewn them the impracticability of efficiently excluding foreign trade from so long a line of coast, Mr. GUTZLAFF urged very

strongly the expediency of rendering legitimate what was now conducted with all the defiance of the laws, and other evils attendant on a smuggling trade already so apparent in Canton. Both messengers assented very readily to the soundness of the advice, adding arguments of their own in a very conciliatory strain, and regretting much that it was against the imperial orders. Mr. GUTZLAFF dwelt particularly on the facility which Fuh-chow possessed for the tea trade: this they fully admitted; but again the Emperor having confined the trade to Canton, there was really no remedy; and it was quite in vain attempting to open the trade at this port. Mr. GUTZLAFF then adverted to the murderous attack upon us on the 11th; of this they at first alleged total ignorance, and then ascribed the attack to the treachery of the common natives. Mr. GUTZLAFF however told them, that it was their officers and soldiers who acted to the best of their ability the part of treacherous and cowardly murderers; while the poor peasantry had always conducted themselves towards us with the greatest kindness. That we were now come with a petition, calling for redress by the punishment of those assassins, the granting of which was the only means of preventing retaliation; the lives of peaceful people having been brought into the most imminent danger, which violence justified violence in return, even if we were to take a life for each of our lives that had been so endangered. Here all concurred in reprobating such conduct as we had experienced, and in assuring us, that we should meet with no such molestation from them, trying to put as good a construction as possible on the past. Mr. GUTZLAFF repeatedly requested them to allow the people to bring us provisions; but to this they turned a deaf ear. As we rose up to come away, the messenger of the Viceroy, to whom I had handed the petition, wished to return it; but I refused to receive it back. He said he could report what we had said; but durst not deliver the petition. Mr. GUTZLAFF, however, succeeded in getting him to promise its delivery, by reminding him, that he had been sent hither on our account, and it would be strange, if after all, we should be obliged to carry our remonstrance ourselves to Fuh-chow. This hint had the desired effect. On the afternoon of the 15th, a polite note was sent to the admiral's junk, requesting a supply of provisions, to be procured for us, as the people were prohibited from bringing any thing to the ship. The boat brought back a remnant of a shoulder of pork, a dried cuttle-fish, and four pieces of sugar-cane; these were immediately returned. Mr. GUTZLAFF was good enough to go on board by another boat, accompanied by Captain MCKAY and Mr. STEVENS, to require an explanation of this piece of rudeness; and to inform them

that if in two days I got no answer to my petition for redress, the consequences would not be imputable to me, but to their government. They at first denied that any thing had been sent; but finding this would not do, they alleged, that the pork and fish were intended for the boatmen, and the sugar-cane for the little lad that steered the boat. No indication of such appropriation was made when the things were put into the boat, so that the excuse was evidently an after-thought. Finding that another admiral, who had arrived in the forenoon, was of the party, Mr. GUTZLAFF again expatiated on the atrocity with which we had been treated. No attempt at defending it was offered. The messenger of the Viceroy said, that the petition had been sent, but he was unable to say, how soon we might expect an answer. At this second meeting, Mr. GUTZLAFF pointed out the freedom with which Chinese subjects were allowed to follow any honest avocation they chose at our settlements, and claimed, on the principles of reciprocity, the accordance of similar privileges in return.

On the 16th, Mr. GUTZLAFF, having found some passages of Chinese law particularly applicable to our assailants, went in the evening to point them out to the mandarins, and for their further consideration, copied them out in their presence, and left the extracts with them. Applications for provisions, and promises to supply them, were renewed. On the 17th, a boat arrived from Fuh-chow, at 8 A. M., and was received by the junks with a salute. A little after, a boat came alongside, and made off again with all expedition, after leaving an open note, stating that the orders of the Viceroy had arrived, and that we ought to go on board the admiral to receive them. Mr. GUTZLAFF wrote in reply, that the person who was charged with the communication of the order was in duty bound to deliver it, and that we expected he would bring it accordingly. This was sent by the ship's boat, which soon after returned with a note, stating that since we were afraid to go on board the admiral's junk, they had made out a copy of the order, not choosing to send the original by the young man whom we had sent in charge of the boat. The half hour that our boat was detained was entirely occupied in framing and copying this note. The paper which they pretended to have copied in that time was a roll nearly six feet in length, which could not have been written in the fair style which it exhibited by the most expert penman in less than a couple of hours. We afterwards compared it with the original, and found that it was written in the same hand, and was in every respect, except in the sealing, a fac-simile of the original. Our second petition accompanied this copy. The intention was no

doubt to cheat us out of the original—an object of some value in the eyes of the Chinese diplomatists, who are always anxious to withhold authenticated papers, for fear of furnishing documents that may some day be brought forward in evidence against themselves—a use to which no unsealed documents can be applied, according to Chinese law and practice. The possession of this copy enabled us to prepare a final communication to the Viceroy, and in order to secure the delivery into our hands of the original, the ship was dropt up with the flood abreast of the junk fleet, and her broadside brought to bear upon them. There were 19 vessels in all on the spot; but all the smaller ones immediately got under-weigh, and passed within the forts. When we went on board the admiral of the station, we learned that the orders of the Viceroy were addressed to the admiral of Haetan, who was on board another junk. He and the envoys from Fuh-chow were sent for; but it was some time before they made their appearance. Our host, in the mean time, appearing very uneasy and dispirited, we asked what was meant by saying that we were afraid of going on board his ship. Some of us had been there on each day since our return. It was obvious, that fear of retaliation had prevented him from renewing his visits since we came back; but if we thought it right to retaliate it, we should not have imitated the treacherous and cowardly conduct of his countrymen, but openly brought our ship to fight the whole of theirs, and he must be perfectly aware, that as she then lay she could sink his whole fleet, and destroy every one on board. But this was not our object. The government had implicated itself in the business by inventing such a string of notorious falsehoods in defence of the conduct of its officers, and we should leave it to our Government to obtain for us the redress which theirs refused to our simple and respectful application.—The original letter of the Viceroy and his colleagues having been at last produced and taken possession of by me, I returned the copy sent in the morning. We were promised our supply of provisions as soon as we got under-weigh. The final reply to the Viceroy, along with my second petition, under a fresh cover, were now placed in the hands of the principal envoy, who pressed me hard to receive them back, and even followed me out, as if he intended to throw them after me into the boat. Judging apparently that this would be of no avail, he kept them till evening, and then sent a small fishing boat with them to the ship. The fisherman, however, being warned off, carried them back, and we saw no more of them. On the 18th and 19th, we gradually dropped down to the outer bay. No provisions were ever sent us.

IV.—*Selected Specimens of the Sub-Himálayan Fossils in the Dádúpur Collection.* By Lieut. W. E. BAKER, Engineers.

The discovery of the existence of fossil organic remains, in the vicinity of the village of *Ráyawála*, and in the *Markanda* pass, has led to the examination of the tract of tertiary hills lying between the river *Jamna* and *Pinjor*. From different points on this line, specimens have been obtained, and the fact of its richness in such relics fully established.

The greater number of the specimens in the *Dádúpur* collection, are from the hills lying between the *Markanda* pass and *Pinjor*. The calcareous sand-stone prevalent in these formations has usually appeared as the matrix containing them; an exception, however, occurs in the neighbourhood of *Dádgarh*, where the matrix, instead of sand-stone, is a red indurated marl, in which not only the remains of Mammalia and Reptilia are found, but those of Mollusca also. The native collector reports them to occur together, and along with the shells, produced fragments of bones and vertebræ of Saurians. Having as yet had no opportunity of visiting the place, I can neither corroborate his statement, nor particularise the site of the deposit. The shells appear to belong to fresh water species; they are not abundant, and are generally in a bad state of preservation. The red marl is with difficulty disengaged from the specimens; any attempt to separate the shell from the matrix, being usually at the expence of the epidermis, and too frequently at that of the valves themselves. Nos. 45, 46, 47, 48, (Pl. XLVIII.  $\frac{1}{2}$  size,) shew the usual state of the specimens; the varieties are few in number, but the determination of fossil species requires so much experience and nice discrimination, that no apology will be requisite to excuse silence on this interesting point. A selection, which is to be placed at your disposal, will, it is hoped, afford the means of determining the question. The univalves bear a small proportion only to the bivalves, being in the ratio of 1 to 100; it must, however, be remarked, that the quantity hitherto collected being small, the above proportion might be materially affected by an inconsiderable increase to the number of specimens\*.

\* We have ventured to preface Lieut. BAKER'S enumeration of the principal Sub-Himálayan fossils of the *Dádúpur* collection by the above extract from a paper previously drawn up by his friend and coadjutor Lieut. DURAND, on the remains of the hippopotamus of the same field, for the sake of pointing out the locality in the extensive range of lower hills, whence they have been exhumed. Lieut. DURAND'S beautiful drawings, being, from their size, better adapted to the pages of the *Recherches*, will, in the first instance, receive publication in

The accompanying plates contain drawings  $\frac{1}{4}$ th the natural size of a few of the Sub-Himálayan fossils in the Dádúpur collection, viz. selected specimens of the remains of the horse, the hog, ruminants and carnivora.

To save a lengthened description, and the use of technical terms, with which I am not familiar, as well as for the sake of ready comparison, I have accompanied my drawings of several fossils by those of the corresponding bones of their existing analogues.

I may here remark, that the greater part of the fossil, as well as of the recent bones, were sketched with the assistance of the Camera Lucida, and allowing for the slight errors incidental to that instrument, I believe them to be correct "plans and elevations," if I may use the term, of what they are intended to represent.

*The fossil horse—Pl. XLV. figs. 1 to 19.*

The remains of this animal, now in our collection, are amongst the latest of our acquisitions; and as many of them present a marked difference from the fossil horse, described by CUVIER, which appears not to have been distinguishable from the existing species, I have been induced to figure nearly all our recognized bones of this genus.

Fig. 1 represents a fragment of a left molar of the upper jaw; though a mutilated specimen, it clearly shews the same complicated flexures of the crown, compared with fig. 2, which is the fourth left upper molar of the existing horse. Fig. 3, shews the fourth and fifth molars of the left lower jaw of the fossil, and fig. 4, the same teeth of the volume now in the press, along with the highly interesting description of the *Sivatherium*, by Messrs. FALCONER and CAUTLEY.

The shells of the red marl, alluded to above, are perfectly identical, both in form and state of preservation, with those we received with the collection of Ava fossils from Colonel BURNEY. No drawing is given of these shells in Professor BUCKLAND's account of the Burmese Mastodon, and he remarks, that "neither the insulated concretions from Ava, nor those adhering to the bones, contain traces of any kind of shells;" but on noticing the peculiarities of the tertiary strata in the neighbourhood, he says, "among the most remarkable of these strata is a fresh-water deposit of blue and marly clay, containing abundantly shells that belong exclusively to a large and thick species of *Cyrena*." This doubtless coincides with figs. 45, 46, of our plate:—and further, "also a dark-coloured slaty lime-stone, containing shells which Mr. SOWERBY has identified with some that occur in our London clay. There is also, from the hills opposite Prome, granular yellow sandy lime-stone, containing fragments of marine shells, and much resembling the calcaire grossièr of the environs of Paris." This I presume alludes to the spiral univalve, fig. 44, which I find precisely among Colonel BURNEY's specimens, and which much resembles the principal shell of the calcaire grossièr.—ED.

the recent horse : between these, the difference, though obvious, is less remarkable than in the upper teeth.

The fossil axis, fig. 5, differs from the recent fig. 6, in its greater proportional breadth, and the greater expansion of its lower articulating surfaces, *a. a.*

The fossil femur, (fig. 7,) or rather its upper extremity, has a strong resemblance to the recent fig. 8 ; a slight difference only appearing in the form of the condyle, and the greater flatness in the fossil, of the space between the condyle and trochanter.

In the lower extremity of the radius, (fig. 9,) in the astragal, (fig. 10,) in the metacarpal and phalanx, (fig. 11,) I am unable to detect any distinctive difference from the corresponding parts in the recent horse.

To the above collection, I have since been enabled to add further drawings of the fossil teeth of the horse, to aid in determining whether it exhibit any difference from the existing species.

Figs. 12 to 18, are from specimens in the cabinets of Captain CAUTLEY, with whose permission I send them. Fig. 19, is from a tooth now belonging to Colonel COLVIN, and by him intended for presentation to the Asiatic Society, who will, I trust, excuse the liberty I have taken in drawing it, which I would not have done, had our own specimen (No. 1 of my last sheet) been sufficiently perfect to stand for the type of the species found in the upper formation.

Figs. 12, 13, 14, 15, 16, 17, are from the bed of the Jamna, between Agra and Allahabad.

Fig. 12, appears to be a right upper molar, perhaps the 3rd : this very perfect specimen has a close resemblance to the teeth of the existing horse ; but the flexures of its enamel are undoubtedly more complicated than those of the specimens of horse and ass, with which I have compared them. The pillar, *a*, is also much longer, though the proportions of this part are doubtless affected by the degree of attrition to which the tooth has been subjected, as will be seen more clearly in figs. 13 and 14 ; of which,

Fig. 13, is from the right side of the upper jaw of, apparently, a very old animal ; it may be observed, that the pillar, *a*, is very much enlarged.

Fig. 14, is also from the right upper jaw. I suppose it to be a young tooth, of which the flexures of enamel have not completely burst through the original envelope, and have not been worn down to the usual form : in this, as was to be expected, the pillar is small.

Fig. 15, is the 2nd or 3rd molar of the jaw, right side.

Fig. 16, a fragment of a similar tooth.

Fig. 17, probably the rear molar of the right lower jaw; these three present no remarkable difference from similar teeth of the recent horse.

Fig. 18, is the beautiful specimen from the marl formation in the *Kálawála* pass, alluded to by Dr. FALCONER, in his letter, read to the Society on the 14th January, 1835.

Fig. 19, the 2nd or 3rd right upper molar from the upper or sand formation of the Sub-Himálayas: there is a slight difference between the flexures of enamel of this, and of the fragments, fig. 1, of my own collection, but not more than is perceptible between the several molars of the present horse.

From the above specimens, (if I may be allowed to generalize from so few,) it would appear, that we have three varieties of upper molars of the fossil horse.

1st. From the \*lower marl formation, (*Kálawála* pass,) fig. 18. This tooth is distinguished from the recent, and from the *Jamna* varieties, by the pillar, *a*, being detached from the rim of enamel encircling the rest of the tooth, (as was remarked by Dr. FALCONER,) and from the 2nd (undermentioned) variety, by the comparative simplicity of the flexures.

2nd. From the sand formation, fig. 19.

In this variety also, the pillar is detached, but more elongated, than in the 1st; the interior flexures are remarkably complicated.

3rd. From the bed of the *Jamna*, between Agra and Allahabad. In this the pillar forms a part of the exterior rim of enamel: in shape it resembles that of the 2nd variety, but the interior flexures are more like those of the 1st. It appears doubtful, whether or not this last variety will be considered identical with the existing species.

*Fossil hog—Pl. XLVI. figs. 20, 21.*

The specimen represented by fig. 20, is in its substance so soft and friable, that it was difficult, without destroying the fossil, to remove even so much of the matrix as enabled me to take the accompanying sketch. It must still remain in doubt, whether the exterior incisors be wanting, or whether they be only concealed under the sand-stone, covering the parts *a, a*. I am myself inclined to the latter supposition, from the close agreement in other respects of this fossil with the lower jaw of a wild sow, lately killed in the *Ráyawála* jungles; in both instances the molars appear to have been very much worn. The comparative sizes of the fossil, and the above-mentioned recent specimen, are 21 and 17.

\* An upper marl has also been met with, containing shells, and the teeth of crocodiles. See remarks in page 565.



Fossil Bones of the Sub-Himalayas - Horse.



